**Unit 3 Map – Cellular Metabolism**

AP Biology

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| **Topic** | **Learning Target** | **Checkpoint Score** (%) | **Test Score** (%) |
| 1. Cellular Respiration (Aerobic and Anaerobic) | A. I can identify the overall goal, reactants, and products of each step of aerobic and anaerobic cellular respiration. |  |  |
| B. I can describe the amount and type of ATP production in each step of aerobic cellular respiration |
| C. I can identify the location of each step within the cell or mitochondrion (both aerobic and anaerobic). |
| D. I can draw and evaluate diagrams of each step in aerobic cellular respiration |
| E. I can compare and contrast aerobic vs. anaerobic respiration and identify organisms that use each type of respiration |
| F. I can compare and contrast lactic acid fermentation and alcoholic fermentation. |  |  |
| 2. The Light Reactions and Calvin Cycle | G. I can explain how light energy is captured in the chloroplast and sent to the Calvin Cycle. |
| H. I can identify the parts of the chloroplast and molecules involved in the Light Reactions. |
| I. I can explain how energy from the Light Reactions is used in the Calvin Cycle to make glucose. |
| J. I can identify the parts of the chloroplast and molecules involved in the Calvin Cycle. |  |  |
| 3. Exceptions to Normal Photosynthesis | K. I can discuss the purpose of C4 and CAM photosynthesis. |
| L. I can compare and contrast C4 and CAM photosynthesis with normal (C3) photosynthesis. |
| 4. Comparing Photosynthesis and Cellular Respiration | M. I can compare and contrast the overall chemical equations for photosynthesis and cellular respiration and describe how these processes work together as a cycle. |  |  |
| N. I can identify the types of organisms that use photosynthesis, cellular respiration, or both. |
| O. I can compare and contrast the purpose and process of the electron transport chain in chloroplasts and mitochondria. |